

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for stretching a single-stranded nucleic acid, comprising:

providing a reaction detecting section including a first electrode, a second electrode, and a reaction well sandwiched between the first electrode and the second electrode, the reaction well containing an aqueous solution of pH 5 to 11, and the first electrode having a surface area smaller than that of the second electrode;

adding the single-stranded nucleic acid in a coil form to the aqueous solution;
~~and~~

applying an ac voltage of a high frequency to the first electrode and the second electrode, thereby forming an ac electric field in the aqueous solution to stretch the single-stranded nucleic acid; and

migrating the stretched single-stranded nucleic acid toward the first electrode.

2. (Previously Presented) The method according to claim 1, wherein the high frequency is 500 kHz or higher, and an amplitude of the ac electric field is 1.2 V/ μ m or higher.

3. (Previously Presented) The method according to claim 1, wherein the first electrode and the second electrode are separated by a distance such that no convection is induced in the aqueous solution.
4. (Previously Presented) The method according to claim 1, further comprising migrating the single-stranded nucleic acid toward the first electrode by dielectrophoresis.
5. (Withdrawn) A nucleic acid stretch system, characterized in that hybridization is conducted by using, as one of complementary strands, a single-stranded nucleic acid stretched by a method according to claim 1.
6. (Withdrawn) A nucleic acid stretch system provided at least with a reaction well capable of storing an aqueous solution therein and a means for forming a high-frequency ac electric field in said reaction well, characterized in that a single-stranded nucleic acid existing in said reaction well is stretched under an action of said high-frequency ac electric field.
7. (Withdrawn) The nucleic acid stretch system according to claim 6, wherein said reaction well is provided with at least a pair of opposing electrode, and said single-stranded nucleic acid is immobilized at an end thereof on a surface or surfaces of one or both of said opposing electrodes.

8. (Withdrawn) The nucleic acid stretch system according to claim 7, wherein a distance between said opposing electrodes is 40 μm or shorter.
9. (Withdrawn) A nucleic acid stretch system, characterized in that using an stretched single-stranded nucleic acid as one of complementary strands, hybridization is conducted in said reaction well as described in claim 6.
10. (Withdrawn) A DNA chip characterized by use of a means for stretching a single-stranded nucleic acid, which exists in a free or immobilized form in an aqueous solution of pH 5 to 11, under an action of a high-frequency ac electric field applied to a reaction well with pure water or said aqueous solution retained therein.
11. (Previously Presented) The method of claim 1, wherein adding the single-stranded nucleic acid comprises fixing an end of the single-stranded nucleic acid to the first electrode.
12. (Previously Presented) The method of claim 1, wherein the aqueous solution comprises pure water.
13. (Previously Presented) The method of claim 3, wherein the distance is 40 μm or less.